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United States Patent

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John Doll

Acting Director of the United States Patent and Trademark Office



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(54) **QUANTIFYING PSYCHOLOGICAL STRESS LEVELS USING VOICE PATTERNS**

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(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 437 days.

This patent is subject to a terminal disclaimer.

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See application file for complete search history.

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(57) **ABSTRACT**

A system and method of assigning a numeric score to a voice pattern of a human subject wherein the score is indicative of the psychological stress level of the human subject. A verbal utterance of a human subject is converted into electrical signals to provide a subject wave pattern. The pattern is quantified and compared with known voice pattern characteristics which exhibit a sequential progression in the degree of blocking in the pattern, wherein each of the known voice patterns is assigned a numerical value range. A numerical value obtained from calculations is assigned to the subject wave pattern based on the comparison. The numerical value represents the degree of blocking present in the subject wave pattern which correlates to the amount of psychological stress exhibited by the human subject.

9 Claims, 11 Drawing Sheets

